

Appl. No. 10/786,431
Docket No. H1799-00201
Reply to Final Office Action of November 1, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. -3. (Canceled)

4. (Previously Presented) A thermal bus arranged within an electronics system for transporting thermal energy in a directed manner comprising at least one loop thermosyphon comprising an evaporator and a condenser that are interconnected in flow communication to one another by one conduit comprising a pair of concentrically arranged tubes, wherein said pair of concentric tubes comprises an inner tube and an outer tube such that an annular void is defined between them so as to form a vapor transport space, and further wherein said inner tube comprises a melt-processable copolymer of tetrafluoroethylene.

5. (Previously Presented) A thermal bus according to claim 4 wherein said outer tube hermetically engages said condenser portion and said evaporator portion and said inner tube engages said condenser portion and said evaporator.

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6. (Original) A thermal bus according to claim 4 wherein said condenser portion comprises a vapor vessel and a liquid vessel.
7. (Original) A thermal bus according to claim 6 wherein said liquid vessel comprises a liquid header and a vapor plenum that are separated by a bulkhead.
8. (Original) A thermal bus according to claim 7 wherein said vapor plenum is in flow communication with said vapor vessel.
9. (Original) A thermal bus according to claim 7 further comprising a port that passes through said bulkhead.
10. (Previously Presented) A thermal bus according to claim 4 wherein:
said vapor transport space is in flow communication with said vapor vessel, said vapor plenum and said vapor conduit; and
said liquid header is in flow communication with said inner tube and a port.
11. (Original) A thermal bus according to claim 10 wherein said inner tube forms an interference fit with said port.

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12. (Original) A thermal bus according to claim 10 wherein said port comprises a nipple.

13. (Previously Presented) A thermal bus according to claim 4 wherein said evaporator portion comprises a plurality of blade-evaporators that extend from a common manifold, wherein said common manifold is arranged in flow communication with each blade-evaporator and with said one conduit.

14. (Original) A thermal bus according to claim 13 wherein each blade-evaporator is joined to said common manifold so that vapor exits from each blade-evaporator to said common manifold and condensate is returned to said common manifold so as to be distributed to individual blade-evaporators.

15. (Original) A thermal bus according to claim 14 further comprising a vapor conduit hermetically engaged with said vapor plenum.

16. (Original) A thermal bus according to claim 15 further comprising a condensate conduit in flow communication with said liquid header.

17. – 22. (Cancelled)